

# SOME NEW SPECIES OF CLOANTHANUS (HOMOPTERA-CICADELLIDAE) FROM THE EASTERN UNITED STATES

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In 1931 Dr. E. D. Ball<sup>1</sup> established several new genera to include species formerly placed under the European genus *Platymetopius*. The name *Scaphytopus* was proposed for one group with *Platymetopius elegans* V. D. as the genotype. Another group, *Cloanthanus*, was established with *Platymetopius angustatus* Osborn as the type. The species for which six generic names were proposed seem to be very similar and it is doubtful if four generic names will prove to be valid genera. *P. elegans* is, however, different from the other species and it seems logical to retain the genus name *Scaphytopus* for *elegans*. Since *P. angustatus* is designated as the type of *Cloanthanus* it has been cited here as the genus name for the larger group of related species. Recent work upon the eastern species of this group, using all the available material, and particularly attempting to identify all of the Illinois specimens has indicated several apparently undescribed species on the basis of external characters and the male genital structures.

Several species have previously been confused and placed under the name *P. acutus* Say. In order to establish all of the species concerned it has been necessary to erect a neotype for that species, since the type has been destroyed.

## *Cloanthanus acutus* (Say)

*Jassus acutus* Say. Jour. Acad. Nat. Sci. Phil. 6: 306, 1831; Compl. Writ. 2: 382.

A pale to dark brown species with yellow, brown margined, face. Length 4.5 mm.

Vertex produced rather sharply, almost two-thirds as wide between eyes at base as median length.

Color: Brown, vertex with median pale vitta at apex and conspicuous pale vittae on disc. Pronotum dark brown, scutellum tawny. Elytra pale with scattered dark brown irrorations leaving many pale spots and areolar spots. Face yellow, heavily infuscated with brown above the white line and at sides.

Genitalia: Female last ventral segment with posterior margin roundedly produced. Male pygofer one-fourth longer than plates. Styles with apical third abruptly narrowed and produced as slender finger-like processes which curve outwardly. Dorsal portion of aedeagus with a long slender ventral process which is sinuate and tapered to apex where it is slightly enlarged. Ventral paired processes long and narrowed to apex. Pygofer long, narrowed to a blunt, produced apex.

This is the common yellow faced species occurring in southern Illinois and Indiana and is undoubtedly the species which Say described. A neotype is erected at this time in order to establish a definite character for future identification. Neotype collected at Greenwood, Wisconsin, August 19, 1916.

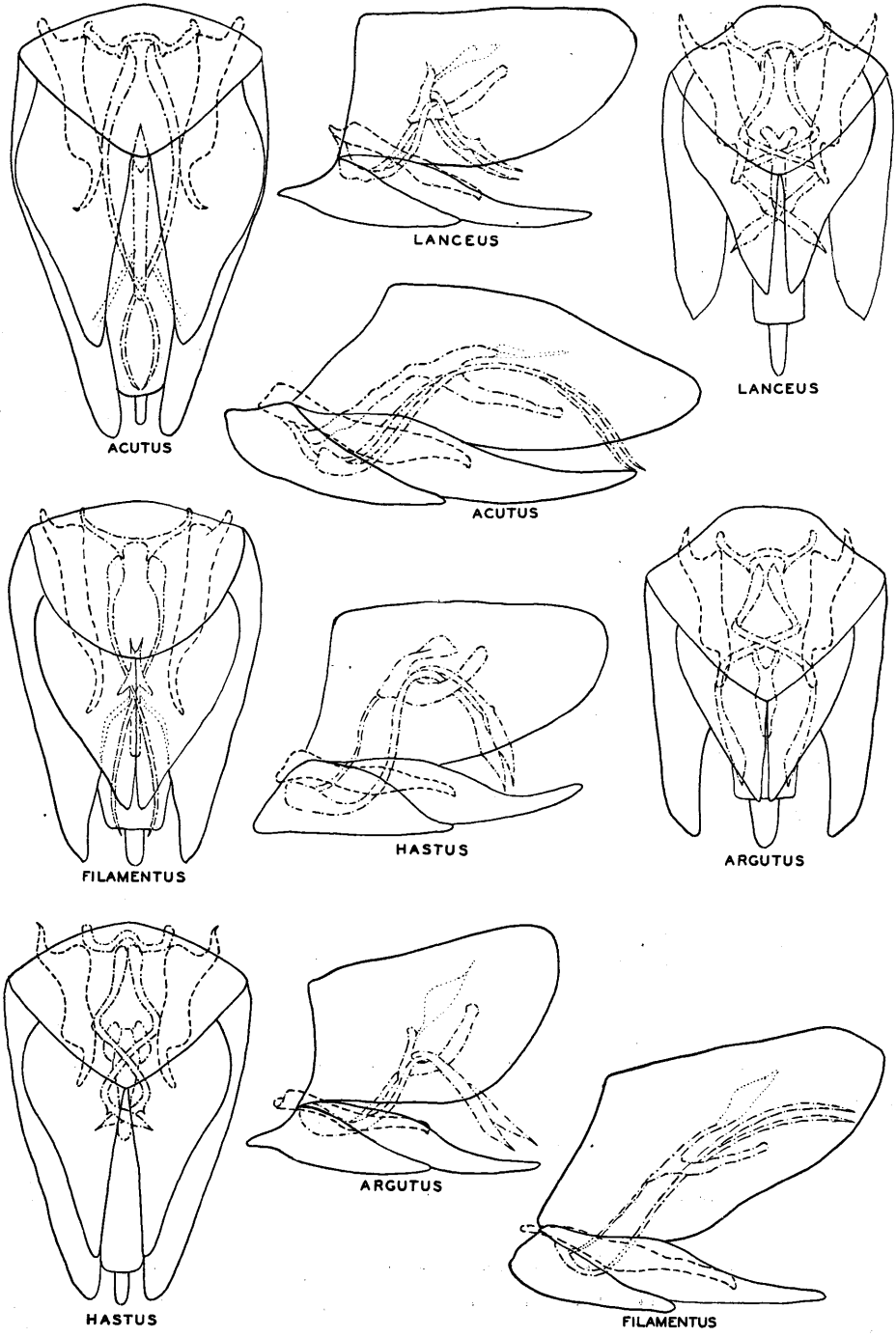
## *Cloanthanus filamentus* n. sp.

Resembling *acutus* in form and general appearance, but paler in color and with a shorter dorsal aedeagus in males and a blunter pygofer. Length 5 mm.

Vertex two-thirds as wide between eyes at base as median length.

Color: Light brown with three pale vittae on apical portion. Pronotum with the usual pale vittae. Apical half of scutellum pale. Elytra rather sparsely irrorate with pale brown so that

<sup>1</sup>Can. Ent., 43: 216-220, 1931.



Ventral and lateral views of male genital structures of species as labelled.

many areolar spots and pale areas are seen throughout the surface. Face yellow with brown margin above.

Genitalia: Female last ventral segment with posterior margin roundedly produced. Male styles narrow, gradually narrowed just beyond middle to narrow curved apical processes which are more than one-third the length of the style. Dorsal portion of aedeagus with an elongated narrow process which is shorter than in *acutus*. Ventral paired processes long, slender, extending almost to apex of pygofer. Pygofer more blunt at apex than *acutus*.

Holotype male and paratype male from Greenville, Pennsylvania, July 14, 1922. Collected by the author.

Types in author's collection.

#### ***Cloanthanus tenuis* n. sp.**

Resembling *acutus* in form and general appearance but with a shorter basally rounded dorsal process of the aedeagus. Length 4.5 mm.

Vertex a little more than half as wide between eyes at base as median length.

Color: Pale brown, vertex with pale longitudinal vittae especially on apical portion of vertex. Pronotum darker on disc, scutellum with apical portion orange yellow. Elytra marked with pale brownish irrorations leaving many pale areas and areolar spots. Face yellow with a brown border above.

Genitalia: Male styles with short finger-like processes at apex which are about one-fifth the length of the styles. Dorsal portion of aedeagus medium in length, narrow and with base sharply curved. Ventral paired processes of aedeagus long and slender, reaching to apex of pygofer.

Holotype male, Capa, South Dakota, August 27, 1919 (Severin). Paratype male, Fish Lake, Utah, September 2, 1930, collected by the author.

Types in author's collection.

#### ***Cloanthanus hastus* n. sp.**

Resembling *acutus* in form and general appearance but with a pale brown face. Length 4.5 mm.

Vertex elongate, sharply angled, decidedly more than half as wide between eyes at base as median length.

Color: Rather dark brown, vertex with median apical vitta and slender elongate lines pale. Pronotum with five longitudinal vittae. Elytra rather heavily irrorate with brown, veins brown. Many pale areas and areolar spots. Face pale brown.

Genitalia: Female last ventral segment roundedly produced on posterior margin. Male plates almost as long as pygofer, gradually narrowed to blunt apices. Style elongate with an abruptly narrowed finger-like process on inner margin of apex which is almost one-third the length of the style. Aedeagus with the dorsal portion rather short and thickened and bluntly pointed at base. Paired ventral processes long and narrow to apical fifth which is widened to form spear-like blades which are pointed at apex and bear a small spine on the upper surface about one-fourth the distance from apex.

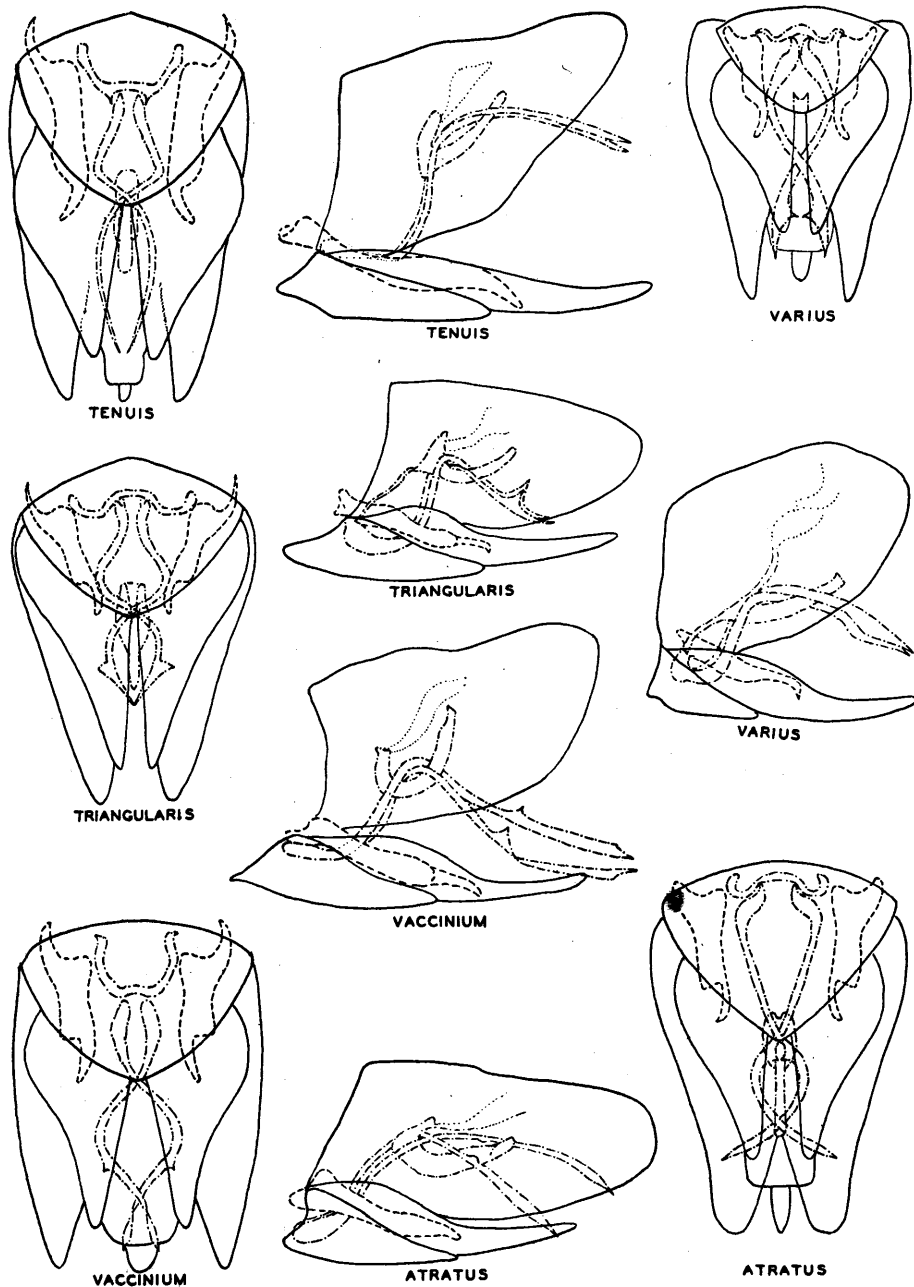
Holotype male, Dixon, Illinois, September 17, 1935; allotype female from Ozark, Illinois, May 18, 1932. Male and female paratypes from same localities and from Cave in Rock, Galena, Centralia, White Pine, Dolson, Mahomet, Des Plaines, Pulaski, Waucanda, Fairfield, Herod, Jeff, Eichorn, Alton, Vienna, and Keithsburg, Illinois; Cranmoor, Wisconsin; Cantwell Cliffs, Ohio; and Neosha, Missouri.

Holotype, allotype and paratypes in Illinois Natural History Survey collection. Paratypes in author's collection.

#### ***Cloanthanus argutus* n. sp.**

In form and general appearance resembling *hastus* but smaller and with distinct male genitalia. Length 4 mm.

Vertex rather sharply angled, a little more than half as wide as median length, one-fourth longer than pronotum.



Ventral and lateral views of male genital structures of species as labelled.

Color: Dark brown with pale markings. Vertex with conspicuous pale longitudinal vittae. Pronotum with several pale punctate spots. Elytra with brown veins and irrorate markings, leaving pale areas throughout and several round pale areolar spots. Face dull yellow below, brown above.

Genitalia: Female last ventral segment roundedly produced on posterior margin. Male plates shorter than pygofer, gradually sloping to bluntly pointed apices. Styles narrowed somewhat at about three-fourths their length, apices rather broad, blunt at apex and produced about one-fourth the length of style. Dorsal portion of style medium in length, a little narrower at apex than base. Ventral paired processes with apical third widened to form a narrow blade which does not bear a spine on dorsal margin. The pygofer is rather broadly rounded at apex.

Holotype male, allotype female and female paratype from Cornelia, Georgia, June 18, 1925. Collected by the author. Type in author's collection.

### ***Cloanthanus lanceus* n. sp.**

A small sharp headed species resembling *argutus* in general appearance but smaller and with different genitalia. Length 4 mm.

Vertex sharply pointed, almost half as wide between eyes at base as median length.

Color: Vertex pale brownish with longitudinal pale markings. Pronotum dark brown with five pale longitudinal vittae. Scutellum paler, apex pale brown. Elytra finely irrorate with dark brown, only a few pale spots visible and with few areolar spots. Face uniform dull yellow to pale brown without infuscation above.

Genitalia: Female last ventral segment roundedly produced on posterior margin. Male style notched on outer margin at about three-fourths its length, forming a finger-like process which is produced to form the apex of the style. Dorsal portion of aedeagus medium in length with a sharp bend at base. Ventral paired processes curved through the bend in the dorsal portion, their apices broadened to form blade-like apices which extend about one-fourth the length of process and bear a pointed heel on upper, inner angle of blade.

Holotype male, allotype female and male and female paratypes collected at Birmingham, Alabama, June 16, 1925, by the author.

Types in author's collection.

### ***Cloanthanus varius* n. sp.**

Resembling *magdalensis* in form but with vertex white mottled with brown and with distinct male aedeagus. Length 4 mm.

Vertex short, blunt, more than three-fourths as wide between eyes at base as median length.

Color: Vertex white with a marginal bar either side at apex and longitudinal brown vittae at apex and between eyes, giving it a transversely banded appearance. Pronotum dark brown. Scutellum tawny with white spots on median portion. Elytra brown, heavily irrorate with dark brown, mottled appearance of lighter coloration and paler areolar spots. Face heavily irrorate with brown.

Genitalia: Female last ventral segment roundedly produced on posterior margin. Male pygofer decidedly longer than plates. The apical one-third of style narrowed to a slender curved finger-like process. Dorsal portion of aedeagus rather long, constricted just before apex. Ventral paired processes broadened on apical fourth to form a blade. Spine on upper margin about one-third the distance from apex and bent inwardly on dorsal margin.

Holotype male, allotype female and male and female paratypes from Monticello, Illinois, June 11, 1934 (Frison and DeLong). Paratype females, White Pine State Park, July 12, 1934 (DeLong and Ross), Starved Rock, July 14, 1932 (Dozier and Park), Dixon Springs, July 9, 1935 (DeLong and Ross), Marshall, September 27, 1935 (Frison and Ross), Elizabethtown, Illinois, June 25, 1932 (Ross, Dozier and Park).

Holotype, allotype and paratypes in Illinois Natural History Survey collection. Paratypes in author's collection.

**Cloanthanus vaccinium n. sp.**

A short broad-headed species resembling *magdalensis* but with distinct genitalia. Length 4.5 mm.

Vertex short, three-fourths as wide between eyes at base as median length.

Color: Vertex brown, appearing banded with conspicuous elongate white vittae at middle of apex and base. Elytra dull brown with scattered darker brown irrorations. Veins brown. White areolar spots along commissure of clavus and in base of apical and apex of anteapical cells. Face heavily irrorate with brown.

Genitalia: Female last ventral segment with posterior margin roundedly produced. Male styles abruptly narrowed at two-thirds their length, apical third finger-like and curving slightly outwardly. Dorsal portion of aedeagus broadly curved at base, narrowed on anterior margin at apex. Ventral paired processes with apical third broadened into blade-like portions. A large conspicuous spine on dorsal margin more than one-third the distance from apex.

Holotype male, allotype female and male and female paratypes from Antioch, Illinois, August 24, 1935. Female paratypes from Volo, Grand Detour, and Dixon, Illinois.

Holotype, allotype and paratypes in Illinois Natural History Survey collection. Paratypes in author's collection.

**Cloanthanus atratus n. sp.**

Form and general appearance of *vaccinium* but with narrower aedeagus blades. Length 4 mm.

Vertex about three-fourths as wide at base as median length.

Color: Brown, vertex with few pale markings, a short apical median conspicuous vitta. Elytra brown with brown veins and scattered brown irrorations, leaving many pale areas and white areolar spots. Face heavily irrorate with brown.

Genitalia: Male plates decidedly shorter than pygofer. Styles with short narrow apical processes which are about one-fourth the length of style. Dorsal portion of aedeagus broad at base, narrowed on apical fourth. Ventral paired processes with apical third widened to form narrow blades. A small spine is on dorsal margin more than one-third the distance from apex.

Holotype male and paratype male collected at Castle Rock, Oregon, Illinois, June 30, 1935 (DeLong and Ross).

Types in Illinois Natural History Survey collection.

**Cloanthanus triangularis n. sp.**

Resembling *magdalensis* but with a more pointed vertex and different male aedeagus. Length 4 mm.

Vertex sharply angled, almost twice as long at middle as basal width between the eyes.

Color: Dark brown with slender pale vittae on vertex. Elytra pale brown, irrorate with darker brown, leaving many pale areas and areolar spots. Veins brown. Face heavily irrorate with brown.

Genitalia: Female last ventral segment with posterior margin roundedly produced. Male plates almost as long as pygofer. Styles with apical third narrowed and produced as finger-like processes. Dorsal portion of aedeagus rather short, narrowed to blunt apex. Ventral paired processes enlarged near apex to form large pointed spines on upper surface which are about one-sixth the distance from apex.

Holotype male, allotype female and male and female paratypes from Shawneetown, Illinois, June 14, 1934 (Ross and DeLong) and June 27, 1934 (DeLong and Mohr).

Holotype, allotype and paratype in Illinois Natural Survey collection. Paratypes in author's collection.

**Cloanthanus parvus var. niger n. var.**

Resembling *parvus* in size and general appearance but with shorter, blunter vertex and darker in color. Length 3.5 mm.

Vertex blunt at apex, two-thirds as wide between eyes at base as median length.

Color: Dark brown, vertex heavily irrorate with a few pale longitudinal markings. Pronotum with five pale vittae. Scutellum paler. Elytra irrorate with brown, leaving many pale spots and white areoles. Face pale brownish.

Genitalia: Female last ventral segment roundedly produced on posterior margin. Male genitalia similar to *parvus*. The dorsal portion of the aedeagus is short and rather thick and is broadly rounded at base. The ventral paired processes are slender throughout.

Holotype male, allotype female and male and female paratypes from Birmingham, Alabama June 16, 1925, collected by the author. In general appearance this appears to be distinct from *parvus*.

Types in author's collection.

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